

Grades 6-8 Mathematics Curriculum

RATIONALE

All students, regardless of different abilities, needs and interests, must be able to use mathematics in their personal life. Mathematics is used in daily life as well as in the workplace. All students deserve to understand the power of mathematics. Students need to solve problems encountered in daily life and to predict future needs or outcomes.

DESCRIPTION/PURPOSE

The mathematics curriculum requires participation in learning, connection to other curriculum areas, using technology, and generalization into the community. Mathematics enables students to fulfill personal ambitions and career goals in an ever-changing world.

Students with severe disabilities are able to build on the following outcomes through the mathematics:

- Learning concepts and skills in order to apply them to problem solving in and outside school
- Use comparison, sequencing, counting, and classifying to solve problems in daily life and in the work force
- Predict future needs through mathematics
- Follow a routine to participate in daily life
- Participate in daily life through the use of technology
- Learn and use signs, symbols and specialized terms of mathematics in communication

Content Description by Grade Level Span

Grade levels are divided into four segments; kindergarten-second grade; third-fifth grade; sixth-eighth grades; and, ninth-twelfth grades. Grade twelve can last up to four years. The curriculum is cumulative in that skills learned during the elementary years are expanded during the middle school grades and so forth. The goals and benchmarks for the student must be selected from the student's curricular grade span. We recognize that each student will accomplish the graduate goals by different means (goals mastered).

Mathematics Grades 6-8			
Graduate Goal 4	Graduates will solve problems or complete tasks.	Show-Me Standard M-1 Addition, subtraction, multiplication, and division; other number sense, including numeration and estimation and application of these operations and concepts in the workplace and other situations. Alternate Framework Standard AltM-1 Counting and grouping strategies used to solve problems encountered in the activities of daily living. Alternate Process Standard: (What All Students Should Do) Goal 1 Alt-6, Goal 3 Alt-2, Goal 3 Alt-3	
Graduate Goal 5	Graduates will follow routines.		
GLE:	Students will perform counting skills.		
STRAND:	Number and Operations		
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code Authentic Learning Activities
Reach for and touch objects to explore quantity.		7810154	Push/slide off a table/surface into a container a card/item for each student and count the cards/items, with assistance if needed, to determine number of students present or number of items needed for specific activities.
Represent and number small collections.		7810155	NO1.1 Setup up situations so students can take a specific number of items to a different location in the school.
Start counting sequence with one.		7810158	NO1.2a Use a counting jig.
Use the counting sequence to enumerate (count one by one) a collection and to identify "how many" items in a collection.		7810160	NO1.3
Demonstrate one-to-one correspondence between objects and counting words.		7810161	NO1.3a Play a game, counting and moving a marker/playing piece. Count dots on dice, move number of spaces. Play Yhatzee, counting dots on dice.
Count with a 1 to 1 correspondence from 1 through 25.		5906010	Focusing on a specific number for the day, have students gather number of items and put in learning centers.
Represent and number collections of items.		7810163	NO1.4 Hand out/release/touch items for different activities, as the items are counted, during the daily routine – lunch tickets, snack items, lunch items, art materials, etc.
Select 1 to 20 objects from a group of more than 20.		5906014	
Demonstrate that the final number said when counting the objects is the quantity of the set.		7810164	NO1.4b
Use numbers in daily activities.		7810165	
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.			

READ, WRITE AND COMPARE NUMBERS

Mathematics Grades 6-8			
Graduate Goal 4 Graduates will solve problems or complete tasks. GLE: Students will perform counting skills. STRAND: Number and Operations	Show-Me Standard M-1 Addition, subtraction, multiplication, and division; other number sense, including numeration and estimation and application of these operations and concepts in the workplace and other situations.		
	Alternate Framework Standard AltM-1 Counting and grouping strategies used to solve problems encountered in the activities of daily living.		
	Alternate Process Standard: (What All Students Should Do) Goal 1 Alt-4, Goal 1 Alt-6, Goal 3 Alt-2, Goal 3 Alt-3		
Authentic Life Skills (What All Students Should Know)	IEP Code	API Code	Authentic Learning Activities
Discriminate between numerals and other printed symbols.	7810168	NO1.7	Recognize the product name (match to grocery list) and locate price.
Select from a group the numerals 1 through 15.	5906021		
Select from a group the numerals 1 through 20.	5906022		
Point to the numerals 1 through 31.	7300066		
Identify the numerals 1 through 31 on a calendar page.	5918001		
Identify the numerals 1 through 15 in random order.	5906033		
Identify the numerals 1 through 20 in random order.	5906034		
Communicate 1-9 numerals by writing, using number cards, using a communication board.	7810169	NO1.9	Show picture of number on card and student finds number of vending machine, candy machine, etc. Student is told (shown) number of students here today and finds that number to place in the attendance folder.
Print numerals.	7810170		Write address on return envelope; develop number of items needed at store; write down attendance.
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.			

READ, WRITE AND COMPARE NUMBERS

Mathematics Grades 6-8			
Graduate Goal 4 Graduates will solve problems or complete tasks. GLE: Students will read, write, and compare whole numbers. STRAND: Number and Operations	Show-Me Standard M-1 Addition, subtraction, multiplication, and division; other number sense, including numeration and estimation and application of these operations and concepts in the workplace and other situations. Alternate Framework Standard AltM-1 Counting and grouping strategies used to solve problems encountered in the activities of daily living. Alternate Process Standard: (What All Students Should Do) Goal 1 Alt-6		
Authentic Life Skills (What All Students Should Know)	IEP Code	API Code	Authentic Learning Activities
Match the numerals 1 through 15 to corresponding sets of objects.	5906025		
Match the numerals 1 through 20 to corresponding sets of objects.	5906026		
Appropriately label the quantity of an empty set using the terms "0", "nothing", or "none".	7810182	NO1.11	Identify items that need to be replaced because they are empty, no more, all gone - detergent, paper towels, soap.
Identify a 2 digit number.	7810183	NO1.12	A timer for cooking. Setting the cooking time on a microwave. A timer for how long the activity is going to last. Telling time with digital clock. Using a remote control to select favorite TV program.
Communicate 2 digit numbers.	7810184	NO1.13	Tell you the amount of time, from a recipe, that an item needs to be in the oven or the microwave.
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.			

READ, WRITE AND COMPARE NUMBERS

Mathematics				Grades 6-8	
<u>Graduate Goal 2</u>	Graduates will make choices.	<u>Show-Me Standard M-6</u> Discrete mathematics (such as graph theory, counting techniques, matrices). <u>Alternate Framework Standard AltM-6</u> Using comparison, sequencing, counting and classifying to solve problems related to daily living. <u>Alternate Process Standard:</u> (What All Students Should Do) Goal 1 Alt-7, Goal 3 Alt-10, Goal 3 Alt-2			
<u>Graduate Goal 4</u>	Graduates will solve problems or complete tasks.				
<u>GLE:</u>	Students will compare whole numbers.				
<u>STRAND:</u>	Number and Operations				
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities	
Recognize or request more and less of something.		7810187	NO1.18	Missing element – need more of something to complete a task or activity.	
Use counting to compare two quantities, up to four items, as same or more.		7810189	NO1.20	Put items in groups that have the same number or amount for students. Student places specific amount of reinforcement in a baggie, such as 3 cheerios per bag for a total of 8 bags, etc.	
Select which is more using numbers 1-20.		7300019			
Associate the number 0 with empty sets.		7810191	NO1.26	Identify items that need to be replaced because they are empty, no more, all gone (detergent, paper towels, soap) using an inventory list made up of specific items needed for each class.	
Select from a group of containers the one that is full/empty.		5930008			
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.					

READ, WRITE AND COMPARE NUMBERS

READ, WRITE AND COMPARE NUMBERS

Mathematics		Grades 6-8		
<u>Graduate Goal 1</u>	Graduates will communicate.	<u>Show-Me Standard M-5</u> Mathematical systems (including real numbers, whole numbers, integers, fractions) geometry, and number theory (including primes, factors, multiples). <u>Alternate Framework Standard AltM-5</u> Using the relationships between whole numbers, fractions, and shapes to understand real-life concepts. <u>Alternate Process Standard:</u> (What All Students Should Do) Goal 1 Alt-6		
<u>Graduate Goal 4</u>	Graduates will solve problems or complete tasks.			
<u>Graduate Goal 5</u>	Graduates will follow routines.			
<u>GLE:</u>	Students will represent commonly used fractions.			
<u>STRAND:</u>	Number and Operations			
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities
Demonstrate an understanding of a whole unit.		7810192	NO2.1	Get "all" of something (all of the dirty towels, all of the cups on the table, all of the dishes out of the dishwasher).
Show that fractional parts are equal shares or equal-sized portions of a whole unit.		7810193	NO2.2	Half a cookie, cut pizza in fourths, divide the class in half for two jobs to do. Using visuals or circles, lay them on the floor to represent the two sections and have the class go and stand on the circle. May want to put name and/or picture on circles.
Explore fractions using manipulatives.		7810194	NO2.2a	Folding paper – letters, cards, napkins and art projects. Folding clothing and linens--may need to use folding jig or provide hand over hand assistance in folding clothing/linens.
Recognize everyday uses of fractional parts.		7810195	NO2.3	Have the student cut a sandwich in half, tape two half circles together in an art project.
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.				

REPRESENT AND USE RATIONAL NUMBERS

REPRESENT AND USE RATIONAL NUMBERS

Mathematics				Grades 6-8	
<u>Graduate Goal 1</u>	Graduates will communicate.	<u>Show-Me Standard M-1</u> Addition, subtraction, multiplication, and division; other number sense, including numeration and estimation and application of these operations and concepts in the workplace and other situations. <u>Alternate Framework Standard AltM-1</u> Counting and grouping strategies used to solve problems encountered in the activities of daily living. <u>Alternate Process Standard:</u> (What All Students Should Do) Goal 1 Alt-4, Goal 1 Alt-6, Goal 3 Alt-2, Goal 3 Alt-3			
<u>Graduate Goal 4</u>	Graduates will solve problems or complete tasks.				
<u>GLE:</u>	Students will compose or decompose numbers using known facts.				
<u>STRAND:</u>	Number and Operations				
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities	
Nonverbally demonstrate combining and separating problems.		7810197	NO3.2		
Add one item to another item (combine items).		7810198	NO3.2a	When paying for items use the “one more” technique. Use dots on the dice to determine number of moves.	
Subtract one item from two items (remove items).		7810200	NO3.2b	Use of calculator; give the student too many plates to set the table and then take one away and have student count dishes.	
Use concrete materials or pictures to solve addition and subtraction situation problems.		7810201	NO3.3	Use social stories. Use the missing element strategy. Follow the recipes on boxes, cake mix, Jell-O, brownies, pancakes, Jiffy mix, and oatmeal box.	
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.					

COMPOSE AND DECOMPOSE NUMBERS

Mathematics				Grades 6-8	
<u>Graduate Goal 1</u>	Graduates will communicate.	<u>Show-Me Standard M-1</u> Addition, subtraction, multiplication, and division; other number sense, including numeration and estimation and application of these operations and concepts in the workplace and other situations. <u>Alternate Framework Standard AltM-1</u> Counting and grouping strategies used to solve problems encountered in the activities of daily living. <u>Alternate Process Standard:</u> (What All Students Should Do) Goal 1 Alt-4, Goal 1 Alt-6, Goal 3 Alt-2, Goal 3 Alt-3			
<u>Graduate Goal 4</u>	Graduates will solve problems or complete tasks.				
<u>GLE:</u>	Students will represent a given situation involving addition.				
<u>STRAND:</u>	Number and Operations				
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities	
Nonverbally demonstrate combining problems.		7810204	NO5.1	Create a social story by sequencing actions to represent a concept (riding bus, waiting turn).	
Add one set to another set (combine sets).		7810205	NO5.1a	Make mixed nuts by pouring a can of nuts into one bowl and another kind in another, and have student pour bowls into one large bowl to combine the nuts.	
Put objects in a container to combine sets of objects.		7810206		Make cereal; pour pudding mix in carton of milk and shake until pudding.	
Subtract some items from a larger set (remove items).		7810208	NO5.1b	Separate cards into two decks (cards are the same size, but different colored backs).	
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.					

REPRESENT OPERATIONS

Mathematics				Grades 6-8	
<u>Graduate Goal 1</u>	Graduates will communicate.	<u>Show-Me Standard M-1</u> Addition, subtraction, multiplication, and division; other number sense, including numeration and estimation and application of these operations and concepts in the workplace and other situations. <u>Alternate Framework Standard AltM-1</u> Counting and grouping strategies used to solve problems encountered in the activities of daily living. <u>Alternate Process Standard:</u> (What All Students Should Do) Goal 1 Alt-4, Goal 1 Alt-6, Goal 3 Alt-2, Goal 3 Alt-3			
<u>Graduate Goal 4</u>	Graduates will solve problems or complete tasks.				
<u>Graduate Goal 5</u>	Graduates will follow routines.				
<u>GLE:</u>	Student will develop and demonstrate fluency with basic number combinations (addition, subtraction and multiplication).				
<u>STRAND:</u>	Number and Operations				
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities	
Use concrete materials to show one or two more or less than the original number.		7810213	NO9.1	Use “one more” technique.	
Show/give one more item.		7810214		As a reward for a correct response, do a “high five” with the student and then say “Give me one more”.	
Show/give two more items.		7810215			
Take away/remove one item.		7810216		During morning activity of developing the work sequence for the student’s object/picture schedule, student gets to remove one work activity.	
Take away/remove two items.		7810217		During morning activity of developing the work sequence for the student’s object/picture schedule, student gets to remove two work activities (one in the morning, one in the afternoon).	
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.					
DEVELOP AND DEMONSTRATE FLUENCY WITH BASIC NUMBERS					

DEVELOP AND DEMONSTRATE FLUENCY
WITH BASIC NUMBERS

Mathematics				Grades 6-8	
Graduate Goal 4	Graduates will solve problems or complete tasks.	Show-Me Standard M-4 Patterns and relationships within and among functions and algebraic, geometric, and trigonometric concepts. Alternate Framework Standard AltM-4 Recognizing shapes and patterns in the environment using visual models. Alternate Process Standard: (What All Students Should Do) Goal 1 Alt-5, Goal 1 Alt-6, Goal 1 Alt-8			
Graduate Goal 5	Graduates will follow routines.				
GLE:	Students will recognize patterns of sounds or shapes.				
STRAND:	Algebraic Relationships				
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities	
Engage in pattern-related activities in the every day environment.		7810171	AR1.1a	Set table by design placemat. Perform music/dance with motions, pictures, objects.	
Recognize the pattern of a pattern-related activity.		7810173	AR1.1b	Follow the pattern of which activity is next. Follow a pictorial sequence to complete an activity or task (cleaning up a room).	
Explore simple repeating patterns with concrete materials.		7810172	AR1.1c	Art activity; build a design from a model--object or pictorial (pumpkin face, tree decorations).	
Reproduce sequenced pattern of objects.		5762011		Set out materials for lunch table according to a list/pattern, etc.	
Reproduce sequenced pattern of objects in left to right progression.		5762012		Teach beginning literacy of left to right progression through various activities in which students repeat patterns of objects/shapes when participating in a variety of art activities/math activities.	
Extend a repeating pattern of sound, shapes, and numbers.		7810175	AR1.1g	Use in a PE class--simple dance steps, basketball drills, Follow the Leader.	
RECOGNIZE AND EXTEND PATTERNS					
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.					

RECOGNIZE AND EXTEND PATTERNS

Mathematics				Grades 6-8	
Graduate Goal 4	Graduates will solve problems or complete tasks.	Show-Me Standard M-4 Patterns and relationships within and among functions and algebraic, geometric, and trigonometric concepts. Alternate Framework Standard AltM-4 Recognizing shapes and patterns in the environment using visual models. Alternate Process Standard: (What All Students Should Do) Goal 1 Alt-5, Goal 1 Alt-6, Goal 1 Alt-8			
Graduate Goal 5	Graduates will follow routines.				
GLE:	Students will recognize patterns of sounds or shapes.				
STRAND:	Algebraic Relationships				
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities	
Create patterns.		7810221	AR2.1	Through art activities, develop objects/animals with repeating patterns (caterpillars, trains, petals of flowers, etc). With students' assistance, develop game boards following a set pattern of pictures (colors, shapes, animals, objects, etc). Use student's primary mode of communication in developing the game boards (eye gaze, touching, pointing, verbalization, communication device, etc).	
Create a simple repeating pattern with concrete materials.		7810222	AR2.1a	Give shape/patterns needed to create an art project, and the student creates the design.	
Describe a simple repeating pattern.		7810224	AR2.2a	Follow simple daily routines (opening activity, lunch routine, group activity).	
Predict "what comes next" for a repeating pattern.		7810225	AR2.2b	Sequence of completing activity, following a visual schedule.	
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.					

CREATE AND ANALYZE PATTERNS

Mathematics Grades 6-8			
Graduate Goal 1	Graduates will communicate.	Show-Me Standard M-2	
Graduate Goal 4	Graduates will solve problems or complete tasks.	Geometric and spatial sense involving measurement (including length, area, volume), trigonometry, and similarity and transformations of shapes.	
Graduate Goal 5	Graduates will follow routines.	Alternate Framework Standard AltM-2	
GLE:	Students will sort objects by attributes.	Applying basic concepts related to size, shape, and amount (including measurement skills) to the activities of daily living.	
STRAND:	Algebraic Relationships	Alternate Process Standard: (What All Students Should Do)	
		Goal 3 Alt-2, Goal 3 Alt-6, Goal 3 Alt-7, Goal 3 Alt-8	
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code Authentic Learning Activities
Match like objects.		7810226	Provide a picture of items needed for cooking, washing hands, etc., and have student locate the items.
Sort, classify and order objects.		7810227	AR3.1 Stack canned goods on a shelf, placing largest ones in the back and smaller ones in front.
Given a class of objects, engage with informal sorting experiences.		7810229	AR3.1a Putting groceries away in appropriate places (freezer items, canned goods, refrigerator items).
Classify objects.		7810230	AR3.1d Find the location of an item, grocery store, looking for can of green beans (so he/she won't look in the freezer). Finding items in the classroom.
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.			

CLASSIFY OBJECTS AND REPRESENTATIONS

Mathematics				Grades 6-8	
<u>Graduate Goal 1</u>	Graduates will communicate.	<u>Show-Me Standard M-1</u> Addition, subtraction, multiplication, and division; other number sense, including numeration and estimation and application of these operations and concepts in the workplace and other situations. <u>Alternate Framework Standard AltM-1</u> Counting and grouping strategies used to solve problems encountered in the activities of daily living. <u>Alternate Process Standard:</u> (What All Students Should Do) Goal 1 Alt-6, Goal 3 Alt-3			
<u>Graduate Goal 4</u>	Graduates will solve problems or complete tasks.				
<u>GLE:</u>	Students will represent a mathematical situation as an expression or number sentence.				
<u>STRAND:</u>	Algebraic Relationships				
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities	
Represent mathematical situations.		7810022	AR4.1	Keeping score in a game or keeping tally of votes.	
Use objects, pictures, words or numbers to represent a mathematical situation.		7810021	AR4.1a	Taking attendance--place pictures of students absent in one column, and those present in another column.	
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.					

REPRESENT MATHEMATICAL SITUATIONS

REPRESENT MATHEMATICAL SITUATIONS

Mathematics					Grades 6-8	
<u>Graduate Goal 2</u>	Graduates will make choices.	<u>Show-Me Standard M-6</u> Discrete mathematics (such as graph theory, counting techniques, matrices). <u>Alternate Framework Standard AltM-6</u> Using comparison, sequencing, counting and classifying to solve problems related to daily living. <u>Alternate Process Standard:</u> (What All Students Should Do) Goal 1 Alt-7, Goal 1 Alt-10, Goal 3 Alt-2				
<u>Graduate Goal 4</u>	Graduates will solve problems or complete tasks.					
<u>GLE:</u>	Students will model situations that involve whole numbers, using pictures, objects or symbols.					
<u>STRAND:</u>	Algebraic Relationships					
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities		
Use models to represent quantitative relationships.		7810176	AR6.1	Using measuring cups for cooking. Using spinners and dice in a game.		
Use pictures, objects or symbols to enact stories or model situations involving whole numbers.		7810177	AR6.1a	Develop social stories that relate to each student and/or seasons/holidays that include numbers.		
Use pictures, objects or symbols to enact stories or model situations involving addition and subtraction of whole numbers.		7810231	AR6.1b	Develop social stories that relate to each student and/or seasons/holidays that include numbers – adding and subtracting numbers. (Have students assist you in developing these stories.)		
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.						

USE MATHEMATICAL MODELS

Mathematics				Grades 6-8	
Graduate Goal 3	Graduates will express personal feelings and self-advocate for needs.	Show-Me Standard M-3 Data analysis, probability, and statistics Alternate Framework Standard AltM-3 Gathering and using quantitative information to predict future need or outcomes. Alternate Process Standard: (What All Students Should Do) Goal 1 Alt-6, Goal 1 Alt-8, Goal 3 Alt-4, Goal 3 Alt-7			
Graduate Goal 4	Graduates will solve problems or complete tasks.				
GLE:	Students will determine qualitative change such as students growing taller.				
STRAND:	Algebraic Relationships				
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities	
Analyze change in a variety of situations.		7810232	AR7.1	When PE/speech services are not possible due to an absence, place a picture of “No PE/Speech” on the schedule. At the time for PE/Speech, have student remove the picture and replace with the replacement activity photo.	
Recognize change in the environment.		7810233	AR7.1a	In a small group activity, have a student take attendance by placing picture of student here in one column and those absent in another. Then take attendance to the office.	
Engage in activities to keep track of change.		7810234	AR7.1b	When PE/speech services are not possible due to an absence, place a picture of “No PE/Speech” on the schedule. At the time for PE/Speech, have student remove the picture and replace with the replacement activity photo.	
Describe change in qualitative terms.		7810235	AR7.1c	Emotion training—student places smile or frown on a face for situations or what pictures describe (boy eating ice cream, girl fell down, boy playing with a dog, etc.).	
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.					

ANALYZE CHANGE

ANALYZE CHANGE

Mathematics Grades 6-8			
Graduate Goal 4	Graduates will solve problems or complete tasks.	Show-Me Standard M-2 Geometric and spatial sense involving measurement (including length, area, volume), trigonometry, and similarity and transformations of shapes. Alternate Framework Standard AltM-2 Applying basic concepts related to size, shape, and amount (including measurement skills) to the activities of daily living. Alternate Process Standard: (What All Students Should Do) Goal 3 Alt-2, Goal 3 Alt-6, Goal 3 Alt-7, Goal 3 Alt-8	
Graduate Goal 5	Graduates will follow routines.		
GLE:	Students will sort 2 dimensional shapes using physical models (circle, rectangle, triangle).		
STRAND:	Geometric and Spatial Relationships		
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code Authentic Learning Activities
Identify, name, compare and/or sort 2-D shapes (pictures).		7810178	GS1.1 Develop a game board and dice/spinner that consists of basic shapes and shapes of common items.
Identify shapes by pointing or other appropriate gesture.		5603039	
Use 2-D shapes for informal play.		7810179	GS1.1a Memory type games.
Release a two-dimensional object.		7600133	Model an art project.
Match common shapes.		7400232	Model an art object, combining shapes; mosaic projects with either paper or tile.
Match 2 dimensional items to identical 2 dimensional items.		5756040	GS1.1b
Match 2 dimensional items to similar 2 dimensional items based on common factors.		5756041	
Recognize and name circle, square, triangle, rectangle in any size or orientation.		7810244	GS1.1f Play a game of Twister or any other game involving shapes and/or safety signs with specific shapes. Have students take turns spinning (can use the All-Turn It Spinner with adapted board) and calling out the shape and color.
Use shape class names, such as rectangle/triangles, to classify and sort.		7810063	GS1.1g
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.			

DESCRIBE AND USE GEOMETRIC RELATIONSHIPS

Mathematics Grades 6-8			
Graduate Goal 4	Graduates will solve problems or complete tasks.	Show-Me Standard M-2 Geometric and spatial sense involving measurement (including length, area, volume), trigonometry, and similarity and transformations of shapes. Alternate Framework Standard AltM-2 Applying basic concepts related to size, shape, and amount (including measurement skills) to the activities of daily living. Alternate Process Standard: (What All Students Should Do) Goal 3 Alt-2, Goal 3 Alt-6, Goal 3 Alt-7, Goal 3 Alt-8	
Graduate Goal 5	Graduates will follow routines.		
GLE:	Students will sort 2 dimensional shapes using physical models (circle, rectangle, triangle).		
STRAND:	Geometric and Spatial Relationships		
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code Authentic Learning Activities
Put together 2-D shapes to make new shapes.		7810180	GS2.1 Participate in various art activities using clay, paper mache, play dough, plaster of paris, etc.
Use shapes in isolation, concrete or semi-concrete, to make a picture.		7810181	GS2.1a
Use shapes (concrete or semi-concrete) by combining the shapes to make a picture or design.		7810237	GS2.1b Participate in art activities to make a pumpkin face; glue shapes/objects to decorate a clay pot for planting; make collages of favorite things and people.
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.			

Mathematics Grades 6-8			
Graduate Goal 1	Graduates will communicate.	Show-Me Standard M-4 Patterns and relationships within and among functions and algebraic, geometric, and trigonometric concepts. Alternate Framework Standard AltM-4 Recognizing shapes and patterns in the environment using visual models. Alternate Process Standard: (What All Students Should Do) Goal 1 Alt-5, Goal 1 Alt-6	
Graduate Goal 4	Graduates will solve problems or complete tasks.		
Graduate Goal 5	Graduates will follow routines.		
GLE:	Students will recognize or demonstrate relative positions in space (above, below, front, behind).		
STRAND:	Geometric and Spatial Relationships		
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code Authentic Learning Activities
Recognize or demonstrate relative positions in space.		7810238	GS3.1 Throughout the students' daily routine, provide opportunities for students to place objects in a variety of positional locations – "Place the bowls on the plates. Put the napkins beside the paper plates."
Place an item above/below another item.		5756018	
Place an item on/off another item.		5756016	
Place item in/out of another item.		5756020	
Place an item under/over another item.		5756017	
Use everyday positional descriptions such as over, under, near, far, between, left, right, above, below, on, beside, next to, to recognize relative positions of objects in space.		7810239	GS3.1a Participate in PE activities using these positional terms (obstacle courses, relay races, etc.).
Use directions with positional descriptions to identify location of objects in space.		7810240	GS3.1b Do a treasure hunt to find objects in the room by giving students direction to the object (on the left, above you, behind the door, etc.).
Carry out 2 requests using prepositions.		5603028	
Plan route to familiar destinations.		6408007	
Walk following a set route.		5295005	GS3.2a
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.			

Mathematics Grades 6-8			
Graduate Goal 1	Graduates will communicate.	Show-Me Standard M-6 Discrete mathematics (such as graph theory, counting techniques, matrices). Alternate Framework Standard AltM-6 Using comparison, sequencing, counting and classifying to solve problems related to daily living. Alternate Process Standard: (What All Students Should Do) Goal 1 Alt-4, Goal 1 Alt-6, Goal 3 Alt-2, Goal 3 Alt-3	
Graduate Goal 4	Graduates will solve problems or complete tasks.		
GLE:	Students will analyze data for patterns and describe important features of the data.		
STRAND:	Data and Probability		
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code
Select from a group of containers the one that will hold the most/least.		5930006	
Select from a group of containers the one that has many/few items.		5930007	
Select the largest/smallest object from a group of objects of various sizes.		5930001	
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.			

DESCRIBE AND ANALYZE DATA

Mathematics		Grades 6-8			
<u>Graduate Goal 1</u>	Graduates will communicate.	<u>Show-Me Standard M-3</u> Data analysis, probability, and statistics <u>Alternate Framework Standard AltM-3</u> Gathering and using quantitative information to predict future need or outcomes. <u>Alternate Process Standard:</u> (What All Students Should Do) Goal 1 Alt-6, Goal 3 Alt-4, Goal 3 Alt-7			
<u>Graduate Goal 4</u>	Graduates will solve problems or complete tasks.				
<u>Graduate Goal 6</u>	Graduates will participate in cause and effect activities.				
<u>GLE:</u>	Students will describe the degree of likelihood of events using words/symbols (i.e., certain, equally likely, impossible).				
<u>STRAND:</u>	Data and Probability				
Authentic Life Skills (What All Students Should Know)		IEP Code	API Code	Authentic Learning Activities	APPLY BASIC CONCEPTS OF PROBABILITY
Attend to another person using a chance device.		7810256	DP7.1a	Students will take turns and watch others while playing games, using dice (adapt dice by using a large foam or cardboard cube with pictures, colors, dots, etc.) or a spinner to move playing pieces around a game board.	
Participate in activities involving chance.		7810258	DP7.1d	Play a variety of games (Yhatzee, card games, lotto game, bingo).	
Assessment of Student Performance: Performance tasks, student performance data, authentic assessment.					